

## CLAIMS

What is claimed is:

Sub A' 7

- 1 1. A method of executing a transaction task within a transaction  
2 processing system, the method including:  
3  
4 responsive to an event, identifying a workflow associated with the  
5 event; and  
6  
7 distributing a task, that at least partially executes the workflow, to an  
8 available thread within a pool of threads operating within a  
9 multiprocessor system.

Sub B' 7

- 1 2. The method of claim 1 wherein the event comprises a transaction  
2 event and the task comprises a transaction task responsive to a transaction  
3 request associated with the transaction event.
- 1 3. The method of claim 2 wherein the transaction task comprises a  
2 transaction routing task that routes the transaction request associated with  
3 the transaction event to an agent of the transaction processing system.

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1 4. The method of claim 2 within the transaction task comprises a  
2 transaction information task to either store or retrieve information pertinent  
3 to a transaction.

1 5. The method of claim 1 wherein the task has a real-time priority and is  
2 distributed in accordance with the real-time priority to the available thread  
3 within the pool of threads.

1 6. The method of claim 1 including identifying a processor affinity  
2 attributed to the task, and assigning the available thread to a processor  
3 within the multiprocessor system according to the processor affinity  
4 attributed to the task.

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1 7. The method of claim 1 including assigning the available thread to a  
2 processor within the multiprocessor system according to a thread priority.

1 8. The method of claim 7 including assigning the thread priority to the  
2 available thread based on a priority of the task distributed to the available  
3 thread.

Sub A<sup>2</sup> 7

1 9. Apparatus for executing a transaction task within a transaction  
2 processing system, the apparatus comprising:  
3

[illegible]

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1 10.

1 11. The apparatus of claim 10 including a task queue to which the task is  
2 dispatch by the dispatcher, and from which the thread within the pool of  
3 threads receives the task.

1 13. The apparatus of claim 12 wherein the scheduler issues the task from  
2 the task queue to the thread within the pool of threads based on a priority  
3 associated with the task.

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1 15. The apparatus of claim 13 wherein the scheduler issues the task from  
2 the task queue according to a real-time priority assigned to the task.

1 16. The apparatus of claim 9 wherein the task comprises a transaction  
2 routing task that routes a transaction request associated with the event to an  
3 agent of the transaction processing system.

1 17. The apparatus of claim 9 within the task comprises a transaction  
2 information task to either store or retrieve information pertinent to a  
3 transaction.

1 18. The apparatus of claim 9 including a dispatcher to identify a  
2 processor affinity attributed to the task, and to assign the thread to a  
3 processor within the multiprocessor system according to the processor  
4 affinity attributed to the task.

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1 19. The apparatus of claim 9 including to assign the thread to a processor  
2 within the multiprocessor system according to a thread priority.

1 20. The apparatus of claim 19 including assigning the thread priority to  
2 the thread based on a priority of the task distributed to the thread.

Sub A<sup>1</sup>3

1 21. A method of operating a transaction processing system employing a

Sub A<sup>3</sup> >

2 multiprocessor architecture, the method including:  
3  
4 establishing a queue of tasks, the queue of tasks including tasks for  
5 both system and transactional functions, and  
6  
7 servicing the queue of tasks utilizing a pool of threads executable  
8 within a systematic multiprocessor environment.

1 22. The method of claim 21 wherein the tasks for the system functions  
2 include any one of reporting, administration or maintenance tasks  
3 performed within the transaction processing system.

1 23. The method of claim 21 wherein the tasks for the transactional  
2 functions include any one of routing, transaction data storage or transaction  
3 data retrieval tasks performed to facilitate a transaction within the  
4 transaction processing system.

Add D<sup>2</sup> >